



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Robert G. Burnley
Director

Jeffery A. Steers
Regional Director

STATE WATER CONTROL BOARD ENFORCEMENT ACTION

SPECIAL ORDER BY CONSENT

ISSUED TO

TOWN OF ORANGE

FOR THE

TOWN OF ORANGE SEWAGE TREATMENT PLANT (VPDES PERMIT NO. VA0021385)

SECTION A: Purpose

This is a Consent Special Order issued under the authority of Va. Code § 62.1-44.15(8a) and (8d) and 10.1-1185 between the State Water Control Board and the Town of Orange regarding the Town of Orange sewage treatment plant for the purpose of resolving certain violations of the State Water Control Law and Regulations.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Va. Code" means the Code of Virginia (1950), as amended.
2. "Board" means the State Water Control Board, a permanent citizens' board of the Commonwealth of Virginia as described in Va. Code § 62.1-44.7 and 10.1-1184.
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in Va. Code § 10.1-1183.

4. "Director" means the Director of the Department of Environmental Quality.
5. "Order" means this document, also known as a Consent Special Order.
6. "STP" means the Town of Orange sewage treatment plant located in Orange County, Virginia.
7. "Regulation" means 9 VAC 25-31-10 *et seq.*, the Virginia Pollutant Discharge Elimination System Permit Regulation.
8. "Permit" means the Virginia Pollutant Discharge Elimination System (VPDES) Permit No. VA0021385.
9. "NVRO" means the Northern Virginia Regional Office of DEQ, located in Woodbridge, Virginia.
10. "Town" means the Town of Orange, a political subdivision of the Commonwealth of Virginia.
11. "BNR Plant" means the Town's planned expanded (three million gallon per day design flow) STP to include activated sludge and biological nutrient removal technology in anticipation of effluent limitations for total nitrogen and total phosphorus.

SECTION C: Finding of Fact and Conclusions of Law

1. The Town of Orange STP has a winter design flow of 1.5 MGD and a summer design flow of 0.75 MGD. The plant is located in Orange County, Virginia and treats wastewater and sewage from the residences, businesses and institutions of the Town of Orange and a portion of the surrounding County of Orange. The STP discharges into the Rapidan River, which is located within the Rappahannock River Basin. The discharge is authorized by VPDES Permit No. VA0021385.
2. The Board has evidence to indicate that the Town of Orange has violated the Permit by: (1) exceeding Permit effluent limits for Total Copper; (2) submitting late a Schedule of Compliance report for achieving compliance with Total Copper limits; (3) submitting late the 4th Annual I&I Progress Report; and (4) by exceeding Permit effluent limits for pH. DEQ NVRO issued one warning letter (WL) and five notices of violation (NOVs) to the Town of Orange for the above-referenced violations as follows: WL No. W2005-04-N-1021 issued April 12, 2005; NOV No. W2005-05-N-0001 issued May 16, 2005; NOV No. W2005-06-N-0001 issued June 13, 2005; NOV No. W2005-07-N-0008 issued July 6, 2005; NOV No. W2005-08-N-0001 issued on August 5, 2005; and NOV No. W2005-09-N-0002 issued on September 12, 2005.

3. On October 29, 2004, DEQ notified the Town that the STP had, for three consecutive months, monthly average flows that exceeded 95 percent of the design flow. The average flows for May, June, and July 2004 were 0.810, .0840, and 0.940-MGD, respectively. The design flow of the STP for that time period was 0.75-MGD.
4. On April 19, 2005, DEQ met with representatives from the Town to discuss the copper compliance issues noted above, anticipated nitrogen and phosphorus requirements, and current and future flows to the STP. Prior to that time, the Town had contracted with the engineering firm of Wiley & Wilson, Inc. to assist the Town in addressing each of these issues.
5. The Town intends to fully comply with existing and future Permit requirements. However, the STP uses a trickling filter technology that is not designed to meet, and cannot meet, the Permit effluent limits for Copper that were imposed for the first time subsequent to construction of the STP. In addition, the Town asserts that it is not practical to utilize the existing STP and in particular its trickling filter technology to meet anticipated nitrogen and phosphorus requirements.
6. The Town Council adopted a resolution in June 2005 expressing its intent to design and construct a new, larger facility by 2010 (the BNR Plant). The Town intends to use state-of-the-art technology and meet Board-established wasteload allocations for nitrogen and phosphorus sufficient for a facility with a design flow of 3.0-MGD. The BNR Plant will also be designed to meet any applicable Copper limits in the Permit for the new facility.
7. If construction of the BNR Plant is found to be financially infeasible, as indicated in Appendix A, the Town shall nevertheless be required to meet applicable Permit effluent limits for Copper, including upgrading or replacing the existing STP if necessary.
8. The Town acknowledges its obligation to comply with all applicable legal requirements. Without granting any exemption from such requirements, the Board acknowledges that the Town may face substantial financial challenges in meeting those obligations. Funding for construction of the BNR plant is likely to be dependent in part on adequate and reliable funding from the Water Quality Improvement Fund (WQIF). The Town shall seek the maximum WQIF grant to assist in meeting its obligations in a timely manner.
9. To fund the construction of the BNR Plant (or upgrade of the existing STP), the Town will be dependent in part upon the fees it charges for new STP connections. The Board and DEQ acknowledge the need for the new connections and will accept the Town engineer's assessment that in the interim the existing facility can meet effluent concentration limits in the Permit, except for Total Copper, under higher flows with minimal or no changes to treatment units.

10. A schedule of construction for the BNR Plant has been developed and incorporated in this Order as Appendix A to achieve consistent Permit compliance. The Appendix also directs the Town to develop Study Plans to additionally address Copper and I&I issues. Furthermore, interim limits are provided in Appendix B of this Order. For the interim, (a) the Copper limit is being removed because the existing STP is not designed to treat Copper and (b) loading limits are similarly being removed because water quality is based on the concentration of pollutants and not the mass and this will allow the Town the option to accept new connections during construction. Concentration limits in the Permit (other than Total Copper) will continue to apply.

SECTION D: Agreement and Order

Accordingly, the State Water Control Board, by virtue of the authority granted it in Va. Code § 62.1-44.15(8a) and (8d), orders the Town of Orange, and the Town of Orange voluntarily agrees that:

1. The Town of Orange shall perform the actions described in Appendix A and B of this Order to remedy the violations described above and achieve compliance with the State Water Control Law and Regulations.
2. The Town of Orange shall pay a civil charge of \$4,200 within 30 days of the effective date of the Order in the settlement of the violations cited in this Order. Payment shall be made by check payable to the "Treasurer of Virginia", delivered to:

Receipts Control
Department of Environmental Quality
P.O. Box 10150
Richmond, VA 23240

Either on a transmittal letter or as a notation on the check, the Town of Orange shall indicate that this payment is submitted pursuant to this Order and shall include the Federal Identification Number for the Town of Orange.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend the Order with the consent of the Town of Orange, for good cause shown by the Town of Orange or on its own motion after notice and opportunity to be heard.
2. This Order only addresses and resolves those violations specifically identified herein as listed above in Section C-2. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent

remediation of the facility as may be authorized by law; or (3) taking subsequent action to enforce the Order. This Order shall not preclude appropriate enforcement actions by other federal, state, or local regulatory authorities for matters not addressed herein.

3. For purposes of this Order and subsequent actions with respect to this Order, the Town of Orange admits the jurisdictional allegations, but neither admits nor denies the factual findings and conclusions of law contained herein.
4. The Town of Orange consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
5. The Town of Orange declares it has received fair and due process under the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, and the State Water Control Law, and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to enforce this Order.
6. Failure by the Town of Orange to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. The Town of Orange shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. The Town of Orange shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. The Town of Orange shall notify the DEQ Regional Director in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order.

Such notice shall set forth:

- a. the reasons for the delay or noncompliance;
- b. the projected duration of any such delay or noncompliance;

- c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
- d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

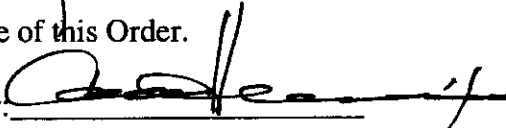
Failure to so notify the Regional Director within five business days of learning of any condition above, which the Town of Orange intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

- 9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
- 10. Any plans, reports, schedules, or specification attached hereto or submitted by the Town of Orange and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents, as amended by any modifications requested by the Town and approved by the Department, shall be considered a violation of this Order.
- 11. This Order shall become effective upon execution by both the Director or his designee and the Town of Orange. Notwithstanding the foregoing, the Town of Orange agrees to be bound by any compliance date, which precedes the effective date of this Order.
- 12. This Order shall continue in effect until the Director or Board terminates the Order in his or its sole discretion upon 30 days written notice to the Town of Orange. Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve the Town of Orange from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.
- 13. The undersigned representative of the Town of Orange certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind the Town of Orange to this document. Any documents submitted pursuant to this Order shall also be submitted by a responsible official of the Town of Orange.
- 14. By its signature below, the Town of Orange voluntarily agrees to the issuance of this Order.

And it is so ORDERED this day of 12 December 2005


Robert G. Burnley, Director
Department of Environmental Quality

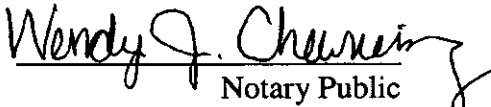
The Town of Orange voluntarily agrees to the issuance of this Order.

By: 
Cole Hendrix, Town Manager
Town of Orange

Date: 10/3/05

Commonwealth of Virginia
City/County of Orange

The foregoing document was signed and acknowledged before me this 3rd day of October, 2005, by Cole Hendrix, Town Manager of the Town of Orange, on behalf of the Town of Orange.


Wendy J. Channing
Notary Public

My commission expires: September 30, 2009

APPENDIX A SCHEDULE OF COMPLIANCE

The Town of Orange agrees to:

1. By no later than November 1, 2005, submit to DEQ for review and approval Copper and I&I Study Plans including study schedules. The purpose of the Copper Study will be to identify, if possible, any large individual source(s) of copper leading to elevated copper concentrations within the collection system. For any such sources that are identified, the Town shall identify options for source control, estimate associated costs and benefits, and submit to DEQ a proposed plan of corrective action including an implementation schedule. The purpose of the I&I Study will be to identify the Town's long-term strategy for addressing I&I issues within the collection system and the ultimate impact it has on the STP and its performance.
2. By no later than November 1, 2005, submit to DEQ a Preliminary Financial Feasibility Report for construction of the BNR Plant. The report shall provide an analysis of and preliminary findings as to whether the BNR Plant is financially feasible (taking into account relevant factors such as limits on the Town's bonding capacity and the impact of the project on the affordability of sewer rates), whether the BNR Plant is financially dependent upon WQIF grant funding, and a cost comparison between the two projects (i.e., constructing the BNR Plant versus upgrading the existing 1.5 MGD STP to meeting all limits including anticipated nitrogen and phosphorus limits).
3. As soon as possible, apply for a grant from the Water Quality Improvement Fund for design and construction of the BNR Plant taking into account the additional costs associated with changing from the existing trickling filter technology to activated sludge and biological nutrient removal technology.
4. By no later than March 1, 2006, submit to DEQ, for review and approval, the Final Financial Feasibility Report for construction of the BNR Plant. The report shall provide an analysis of and findings as to whether the BNR Plant is financially feasible (taking into account relevant factors such as limits on the Town's bonding capacity and the impact of the project on the affordability of sewer rates), whether the BNR Plant is financially dependent upon WQIF grant funding and a cost comparison between the two projects. If the BNR Plant is financially feasible, the Town shall comply with the deadlines in paragraphs 6 through 10 below for beginning construction, completing the expansion, requesting a CTO, and achieving compliance with Permit effluent limits. If the approved Report indicates that the BNR Plant is not financially feasible, the Town shall submit to DEQ for review and approval, no later than June 1, 2006, an alternative plan and schedule to achieve compliance with Permit effluent limits for Copper by no later than December 31, 2009.

5. By no later than November 1, 2005, submit to DEQ an approvable Preliminary Engineering Report (PER), for review and approval, for the BNR Plant.
6. By no later than September 1, 2006, or within one hundred eighty (180) days of approval of the PER if the PER is not approved on or before March 1, 2006, submit plans and specifications for the BNR Plant to DEQ for review and approval.
7. Within one hundred twenty (120) days of approval of the plans and specifications by the DEQ, begin construction of the BNR Plant.
8. Submit quarterly construction project progress reports to NVRO with the Discharge Monitoring Report (DMR) submission and continue to operate the STP in accordance with the Operations and Maintenance (O&M) manual and the Sludge Management Plan (SMP) in order to ensure that the STP produces the best quality effluent of which it is capable, and in order to minimize any additional exceedences of Permit effluent limits and impacts to water quality that may occur while the BNR Plant is under construction. Should the Town engineer's assessment indicate that any interim additions or changes need to be made to STP's treatment units and/or equipment to consistently comply with effluent limits during the period of construction, the Town must first submit to DEQ the plans and specifications for such changes or additions, for review and approval, prior to implementation.
9. By no later than September 30, 2010, complete construction of the BNR Plant in accordance with the approved plans and specifications and request a Certificate to Operate (CTO) from DEQ.
10. By no later than December 31, 2010, achieve compliance with Permit effluent limits at the BNR Plant.
11. During the period beginning with the effective date of this Order and lasting through completion of construction and the three month start up period in accordance with the schedule outlined herein, the Town shall comply with the interim limits in Appendix B in lieu of the comparable limits in the Permit.

APPENDIX B INTERIM EFFLUENT LIMITATIONS TOWN OF ORANGE STP

During the period beginning with the effective date of this Order and lasting until construction of the BNR plant or upgrade of the existing STP is complete in accordance with the schedule provided in Appendix A of this Order, the Town of Orange shall monitor and limit the discharge from the STP in accordance with VPDES Permit No. VA 0021385, except as specified below. These interim limits shall retroactively apply, if applicable, as of the first day of the month in which this Order becomes effective. These requirements shall be construed in light of the Board's Permit Regulation.

PARAMETER	DISCHARGE LIMITATIONS			
	Monthly Average	Weekly Average	Minimum	Maximum
	Concentration	Loading	Concentration	Loading
Biochemical Oxygen Demand, 5-day - "BOD ₅ " (Jan.-Apr.)	25.0 mg/L	NL	NL	N/A
Total Suspended Solids - "TSS" (Jan.-Apr.)	25.0 mg/L	NL	NL	N/A
Total Recoverable Copper (µg/L)	NL		NL	N/A
Biochemical Oxygen Demand, 5-day - "BOD ₅ " (May-Dec.)	30.0 mg/L	NL	NL	N/A
Total Suspended Solids - "TSS" (May-Dec.)	30.0 mg/L	NL	NL	N/A
µg/L = Micrograms per liter.				
MGD = Million gallons per day.	N/A	= Not applicable.		
mg/L = Milligrams per liter.	NL	= No limit; monitor and report.		